INDEXES TO THE JOURNAL

compiled by the

American Ceramic Society

VOL. 44, NO. 12 DECEMBER 1, 1961

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Phase Diagrams for Ceramists

ERNEST M. LEVIN, HOWARD F. McMURDIE, and F. P. HALL. Edited and published by The American Ceramic Society, 1956. 286 pp. Price to members $5. Price to non-members $10.

This basic volume of phase equilibrium diagrams of interest to ceramists, has in addition to 811 diagrams, a general discussion of the phase rule and its terminology. This includes a glossary of some 50 terms peculiar to the phase rule, a comparison of the three important temperature scales in degrees centigrade that have been used since 1914, methods of determining the composition of phase assemblages, the interpretation and representation of multicomponent systems, and a selected and annotated bibliography on the various aspects of phase research. This latter covers theory, interpretation, method and techniques, mathematical treatment, thermodynamic calculations, silicate chemistry, and phase diagrams in related fields.

Phase Diagrams for Ceramists—Part II

ERNEST M. LEVIN and HOWARD F. McMURDIE. Edited and published by The American Ceramic Society, 4055 N. High St., Columbus 14, Ohio. 153 pp. Price to members $5. Price to non-members $8.

Written as a supplement to the preceding volume, described above, this book adds 462 phase equilibrium diagrams to the fund of knowledge for ceramic scientists and engineers. Combined with the 811 diagrams contained in "Phase Diagrams for Ceramists," this makes readily available 1273 phase diagrams.

The index to Part II is cumulative, covering both of these volumes.

Part II diagrams cover (a) metal oxide systems, (b) systems containing non-metal oxides, (c) systems containing halides, sulfides, etc., and (d) water-containing systems. Many of the diagrams deal with electronic ceramics and nuclear ceramics.

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The ten systems:

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2. CaO–MgO–SiO_2
3. MgO–Al_2O_3–SiO_2
4. NaO–Al_2O_3–SiO_2
5. K_2O–Al_2O_3–SiO_2
6. FeO–Fe_2O_3–SiO_2
7. CaO–FeO–SiO_2
8. MgO–FeO–SiO_2
9. FeO–Al_2O_3–SiO_2
10. CaO–Fe_2O_3–SiO_2

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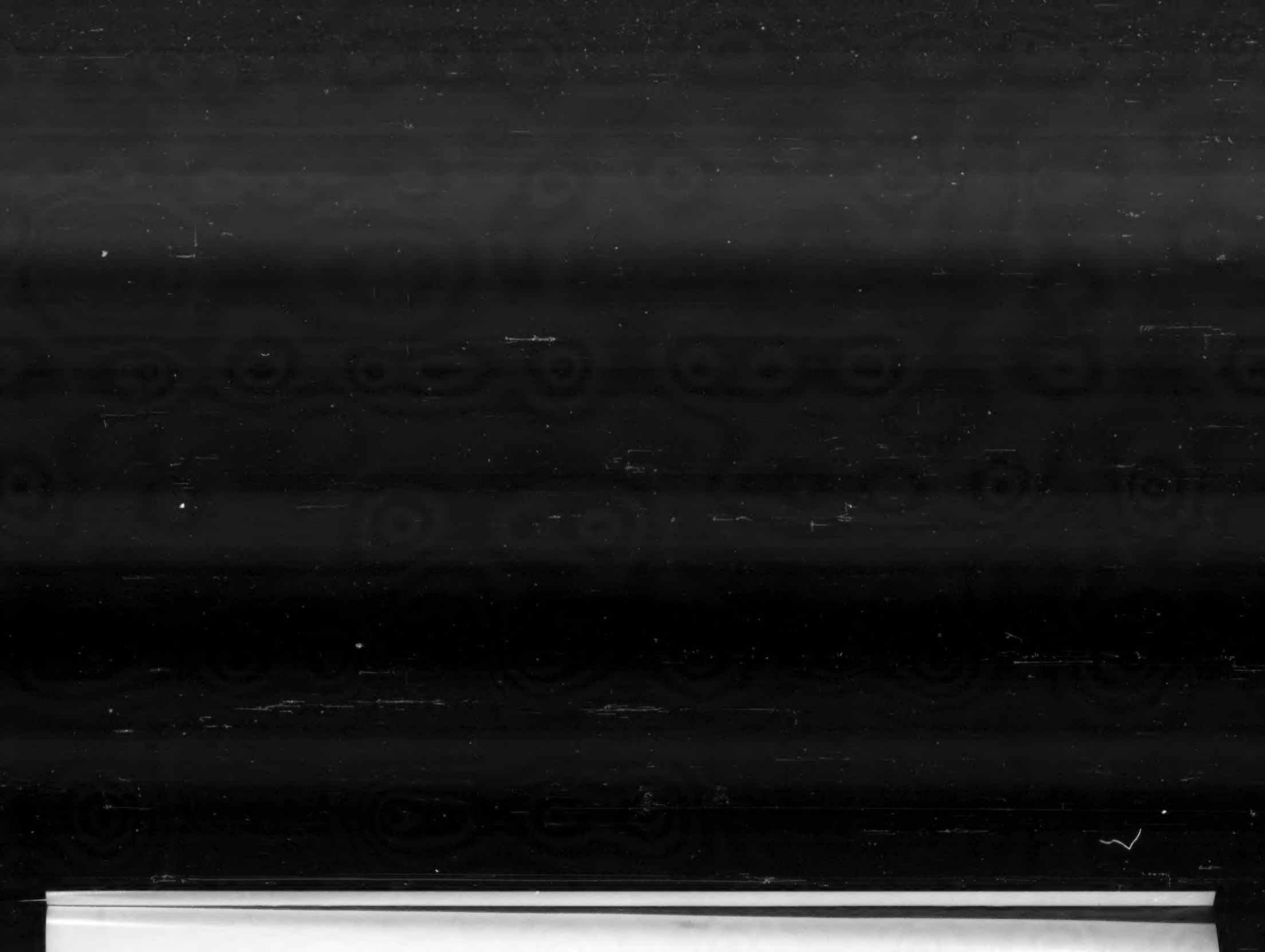

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December 1, 1961 *SECTION*

Compiled by the American Ceramic Society

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